### **ENVIRONMENTAL CHEMISTS**

Date of Report: 04/16/02 Date Received: 04/04/02

Project: Metro Self Monitor, PO# M67821

Date Extracted: 04/11/02 Date Analyzed: 04/11/02

# RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

|      |               |  |          | a fire action at the fire | 4 4 5 5 5 5 5    |             |
|------|---------------|--|----------|---------------------------|------------------|-------------|
|      | Sample ID     | Chromium                                     | Coppe    | <u>r Nic</u>              | <u>kel</u>       | Zinc        |
|      | Laboratory ID |  |          |                           |                  |             |
|      |               |  | Jan Hinu |                           |                  | g Marie - I |
| · 6. | M67821        | 0.12   | 0.13     | 0.0                       | )8               | < 0.05      |
|      | 204021-01     | S. A. S. |          |                           | e ille e illes e | din .       |
|      |               |  |          |                           |                  |             |
|      |               |  |          | No side                   |                  |             |
|      | Method Blank  | < 0.05                                       | < 0.05   | <0.0                      | )5               | < 0.05      |
|      |               |  |          |                           |                  |             |

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 04/16/02 Date Received: 04/04/02

Project: Metro Self Monitor, PO# M67821

# QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 204021-01 (Duplicate)

|          | and a stille when a          | Organisa (Albert   |   | Relative  | edile edile  |  |
|----------|------------------------------|--|---|---|--|--|
|          | Reporting                    | Sample   | Duplicat  | e Percent   | Acceptar   | ice  |
| Analyte  | Units                        | Result   | Result  | Difference  | Criteri  | <u>a</u>   |
| Chromium | mg/L (ppm)                   | 0.12   | 0.12  | 0   | 0-20   | 7(4)   |
| Copper   | mg/L (ppm)                   | 0.13   | 0.13  | 0   | 0-20   | 113  |
| Nickel   | mg/L (ppm)                   | 0.08   | 0.08  | 0   | 0-20   |  |
| Zinc     | mg/L (ppm)                   | < 0.05   | < 0.05  | nm  | 0-20   |  |
|          | Chromium<br>Copper<br>Nickel | Analyte Units  Chromium mg/L (ppm)  Copper mg/L (ppm)  Nickel mg/L (ppm) | Analyte         Units         Result           Chromium         mg/L (ppm)         0.12           Copper         mg/L (ppm)         0.13           Nickel         mg/L (ppm)         0.08 | Analyte         Units         Result         Result           Chromium         mg/L (ppm)         0.12         0.12           Copper         mg/L (ppm)         0.13         0.13           Nickel         mg/L (ppm)         0.08         0.08 | Analyte         Units         Sample Result         Duplicate Duplicate         Percent Difference           Chromium         mg/L (ppm)         0.12         0.12         0           Copper         mg/L (ppm)         0.13         0.13         0           Nickel         mg/L (ppm)         0.08         0.08         0 | Reporting Analyte         Sample Units         Duplicate Result         Percent Perc |

Laboratory Code: 204021-01 (Matrix Spike)

|     | Brahlaite | Reporting  | Spike | Sample | % Recov | ery % Recov | ery Acceptance | e RPI  | )    |
|-----|-----------|------------|-------|--------|---------|-------------|----------------|--------|------|
|     | Analyte   | Units      | Level | Result | MS      | MSD         | Criteria       | (Limit | 20)  |
|     | Chromium  | mg/L (ppm) | 2     | 0.12   | 91      | 93          | 80-120         | 2      |      |
|     | Copper    | mg/L (ppm) | 2     | 0.13   | 103     | 101         | 80-120         | 2      |      |
| 100 | Nickel    | mg/L (ppm) | 4     | 0.08   | 89      | 94          | 80-120         | 5      | 1.5% |
|     | Zinc      | mg/L (ppm) | 2     | < 0.05 | 103     | 111         | 80-120         | 7      |      |

Laboratory Code: Laboratory Control Sample

|          | Rep                               | porting Sp | ike % Reco | very % Recov | ery Acceptan | ce RPI   | )   |
|----------|-----------------------------------|------------|------------|--------------|--------------|----------|-----|
| Analyte  | J. C. Carlotte and C. C. Carlotte | Jnits Le   | vel LCS    | S LCSI       | O Criteria   | a (Limit | 20) |
| Chromium | mg/l                              | L (ppm)    | 2 105      | 103          | 80-120       | 2        |     |
| Copper   | mg/l                              | L (ppm)    | 2 109      | 104          | 80-120       | 5        |     |
| Nickel   | mg/                               | L (ppm)    | 4 103      | 101          | 80-120       | 2        |     |
| Zinc     | mg/l                              | L (ppm)    | 2 108      | 106          | 80-120       | 2        |     |

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

April 16, 2002

#### DUPLICATE COPY

#### **INVOICE # 02ACU0416-1**

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M67821 - Results of testing requested by Gerry Thompson for material submitted on April 4, 2002.

FEDERAL TAX ID #(b) (6)

| 204021 SA   | MPLE CHAIN OF CUSTODY                | ME 4.         | 4.02 AT3.   |
|---|--------------------------------------|---------------|---|
| Send Report To SERALD A. Thompson Company ALASKAN Copper works  Address 628 S. Hancock ST | PROJECT NAME/NO.  METRO SECT MOVIDOR | PO#<br>M67821 | Page # of  TURNAROUND TIME  Standard (2 Weeks) RUSH Rush charges authorized by:   |
| City, State, ZIP SEATIVE 600 18474/ Phone # 206-382-8378 Fax # 206-382-4308               | REMARKS                              |               | SAMPLE DISPOSAL  Dispose after 30 days Return samples Will call with instructions |

|           |           |                 |                 |             |                    |            |              |               |              | ANA             | LYS | ES R           | EQU | ESTI | ΞD |  |        |
|-----------|-----------|-----------------|-----------------|-------------|--------------------|------------|--------------|---------------|--------------|-----------------|-----|----------------|-----|------|----|--|--------|
| Sample ID | Lab<br>ID | Date<br>Sampled | Time<br>Sampled | Sample Type | # of<br>containers | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260 | SVOCs by $8270$ | HFS | Ca, Cu, N, 200 |     |      |    |  | Notes  |
| m67821    | 0(        | 4/4/02          | 12:30           | HZO         | 1                  | •          |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 | (A)         |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  |        |
|           |           |                 |                 |             |                    |            |              |               |              |                 |     |                |     |      |    |  | ****** |

Friedman & Bruya, Inc. 3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

| / SIGNATURE        | PRINT NAME          | COMPANY  | DATE   | TIME   |
|--------------------|---------------------|----------|--------|--------|
| Relingation by     | - CELGO A. Thompson | ACN      | 4/4/02 | 1:07pm |
| Received by Change | 5.060rn             | FAR Inc. | L .    | 1:157  |
| Relinquished by:   |                     |          |        |        |
| Received by:       |                     |          |        |        |

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#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

April 16, 2002

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 4, 2002 from your Metro Self Monitor, PO# M67821 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

r roject manag

Enclosures ACU0416R.DOC